

# SEQUENCE LISTING

<110> Behr, Marcel  
Small, Peter  
Schoolnik, Gary  
Wilson, Michael A.

<120> Molecular Differences Between Species of  
the M. Tuberculosis Complex

<130> STAN102CON

<140> Unassigned

<141> 2001-06-27

<150> 09/318,191

<151> 1999-05-25

<150> 60/097,936

<151> 1998-08-25

<160> 137

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<213> Mycobacteria tuberculosis

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<213> Mycobacteria tuberculosis

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<213> Mycobacteria tuberculosis

<400> 12

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<210> 13

<211> 651

<212> DNA

<213> Mycobacteria tuberculosis

<400> 13

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gatccaatat	gcaccggagg	cggcaatatt	atggcgcatg	tttcgtatgt	tcagtcgggg	600
atgacaagcc	aggcggcgac	attcgcgggc	aacaggctcg	atcacgcggg	a	651

<210> 14

<211> 1674

<212> DNA

<213> Mycobacteria tuberculosis

<400> 14

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ataggttcca	caactgcgcg	ggcgaatgcc	gcggctgccg	cctcgaccac	cgcgcttgcg	120

gccgctggcg	ctgatgaggt	atcggcgggc	gtggcagcgc	tgtttgccag	gttcggtcag	180
gaatatcaag	cggtcagcgc	gcaggcgagc	gctttccatc	aacagttcgt	gcagacgctg	240
aactcggcgt	caggatcgta	tgcgcccgcg	gagggcacca	tcgcgtcaca	gttcgagacc	300
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ctaactcggcg	acggagcacc	cgggacggca	acgagtcgga	atggcggggc	gggtgggctg	420
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accgtcattt	catcggcgct	gatgaatacc	gggttcttgc	ccttcagatt	ccagccgggtg	1620
tacatcgact	acagccccag	cggatatagg	acaacagtct	ttgatcatcc	ggcg	1674

<210> 15

<211> 1674

<212> DNA

<213> M. tuberculosis

<400> 15

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ataggttcca	cactgcgcgc	ggcgaatgcc	gcggctgccg	cctcgaccac	cgcgcttgcg	120
gccgctggcg	ctgatgaggt	atcggcgggc	gtggcagcgc	tgtttgccag	gttcggtcag	180
gaatatcaag	cggtcagcgc	gcaggcgagc	gctttccatc	aacagttcgt	gcagacgctg	240
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gtctacacca	gccccggcgg	tgatcggctc	tacgcgttca	acacaaacga	ttaccgcccc	1560
accgtcattt	catccggcct	gatgaatacc	gggttcttgc	ccttcagatt	ccagccggtg	1620
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<210> 16

<211> 417

<212> DNA

<213> Mycobacteria tuberculosis

<400> 16

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gaatgcctga	ttgtcttgac	cgcccgtcac	ggccccgttg	cgcgcacgat	cttcgaacga	180
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tgtatgacgt	acgcgaccgc	ccagctgggc	caccaaccac	tgctggccgt	cggcaacgac	360
ttcccgc aaa	ccgaccttga	gttcgcggcg	gtcgtcggct	actggccagg	cgtcgcg	417

<210> 17

<211> 684

<212> DNA

<213> M. tuberculosis

<400> 17

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gccacggccg	cgcccaagac	ctactgcgag	gagttgaaag	gcaccgatac	cggccaggcg	120
tgccagattc	aaatgtccga	cccggcctac	aacatcaaca	tcagcctgcc	cagttactac	180
cccgaccaga	agtcgctgga	aaattacatc	gccagacgc	gcgacaagtt	cctcagcgcg	240
gccacatcgt	ccactccacg	cgaagcccc	tacgaattga	atatcacctc	ggccacatac	300
cagtccgcga	taccgccgcg	tggtacgcag	gccgtggtgc	tcaaggtcta	ccagaacgcc	360
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ttcaaccggg	gggagttgct	gcccgaagca	gccggcccaa	cccagggtatt	ggtcccacgt	660
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<210> 18

<211> 684

<212> DNA

<213> M. tuberculosis

<400> 18

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tgccagattc	aaatgtccga	cccggcctac	aacatcaaca	tcagcctgcc	cagttactac	180
cccgaccaga	agtcgctgga	aaattacatc	gccagacgc	gcgacaagtt	cctcagcgcg	240
gccacatcgt	ccactccacg	cgaagcccc	tacgaattga	atatcacctc	ggccacatac	300
cagtccgcga	taccgccgcg	tggtacgcag	gccgtggtgc	tcaaggtcta	ccagaacgcc	360
ggcggcacgc	acccaacgac	cacgtacaag	gccttcgatt	gggaccaggc	ctatcgcaag	420
ccaatcacct	atgacacgct	gtggcaggct	gacaccgatc	cgctgccagt	cgtcttcccc	480
attgtgcaag	gtgaactgag	caagcagacc	ggacaacagg	tatcgatagc	gccgaatgcc	540
ggcttggaac	cggtgaatta	tcagaacttc	gcagtcacga	acgacggggg	gattttcttc	600
ttcaaccggg	gggagttgct	gcccgaagca	gccggcccaa	cccagggtatt	ggtcccacgt	660
tccgcgatcg	actcgatgct	ggcc				684

<210> 19

<211> 1443



<212> DNA

<213> *Mycobacteria tuberculosis*

<400> 19

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tacacaacgg	ccgcatttgg	gcgcgggatc	ggcatctatg	tcggtgtcac	ccacgccatt	300
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gcgatggctt	atctgcacta	ctaccgaatc	attcgccggg	ttggcgatcg	gccgagcact	1440
cgc						1443

<210> 20

<211> 846

<212> DNA

<213> *Mycobacteria tuberculosis*

<400> 20

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gtgcccgatg	aggtcaaaca	gaagatcatc	ggggtgctcg	accgggtggg	caccctgacc	180
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ttctcccgtt	cgagctcagc	gccaacggaa	tctagcgagt	gctcggccga	tcgccaacc	840
ggcgaa						846

<210> 21

<211> 1407

<212> DNA

<213> *Mycobacteria tuberculosis*

<400> 21

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aaatgggtgc	ccgtcgagta	cctcgacaac	gacgtcagcg	catcaaccgg	caagcgccgc	180
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<210> 22  
 <211> 513  
 <212> DNA  
 <213> M. tuberculosis

<400> 22						
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cggctactga	ccggactggc	cggcaacccc	gactacgcac	cgggttttgc	ggtgcagtcg	420
gacgcgggtg	tcgtcgccat	gtggctgtgg	cgcacgctct	gcgaaagcga	cacgccgaac	480
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<210> 23  
 <211> 219  
 <212> DNA  
 <213> M. tuberculosis

<400> 23						
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gacgatcccg	agttcatcgc	cgcgaaaacc	gatctcgttg	ccgcgaacat	cgccggactac	120
ctcatccgca	ccctcgccgc	agcgccgccc	ctgactgacg	agcagcgcac	ccggctggcc	180
gagctgctgc	gccccgtgcg	gcggtcaggc	ggtgcccga			219

<210> 24  
 <211> 396  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 24

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gccggcacac	cggcctggcg	tcagctcgac	gacgccgatc	ctcgcaaagt	ggccgcgatc	240
tgcgacgcag	cccggcactg	ggctctgagg	gtagagacgt	gccaggaggc	gatggcgcag	300
gcgtcacgtg	acgtatctgc	ggccgccgac	tggcccggca	tcgcccgcga	gatcgtccga	360
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<210> 25

<211> 1413

<212> DNA

<213> Mycobacteria tuberculosis

<400> 25

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gcctaccggc	tagccgaacg	ttaccaggag	aagctgtgtc	acgtggccgg	gatcggtgg	180
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caaaggtggc	gggtgcaaga	aggcgtaccc	gaaatctcgc	gcaaagcggtt	cggccagtcg	1320
ctcgacaccc	acggataccc	ggtcactgac	aaggcccggtg	atggtcgttg	gcgggcccga	1380
atagcggtga	gaggggcccga	tgatttcgat	gat			1413

<210> 26

<211> 393

<212> DNA

<213> Mycobacteria tuberculosis

<400> 26

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gcgcacaccc	gctgctgggt	catcgacgct	gactggaccc	caactgctggc	cgccgagctg	180
cgctaccacg	gccacaccgt	caccggaccc	gccgaccggg	cgcaacagca	gtgcaccgac	240
tgggcccagg	cggtgttccg	ggcggtcggg	ccccagcgga	caccgcggct	gtacagggtc	300
ttatccaaag	tgctgcaccc	cgacgcccc	accggatgcc	cgatactgca	acagcagctc	360
aatgccgcca	gaaccgcact	taccaaccct	gct			393

<210> 27

<211> 270

<212> DNA

<213> Mycobacteria tuberculosis

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 ccgaacctgc agaccggcga acccgtcctg ggtgtcgccg acaacaaatg gaagcgcgcg 180  
 aactgtcccc tcgacgtcgg taagccgtgc ccgttcctaa tcgcccaggg tgctgccgac 240  
 agcaccgacg acaccataga ggtcgaccag 270

<210> 28  
 <211> 312  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 28  
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 gtccagggtg tctgctcgca gacgggttgc tcacccgatg cggcggtcga agcactcgaa 120  
 tccttcgcga aagacggaac acttatcctc cgcggcgaca ccgagaacgc ctacctcgaa 180  
 gccggaggca atgttcttgc ccatgccgat cgtgactggc ttgccttcca cgcgtcgat 240  
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 gggtcgccat cg 312

<210> 29  
 <211> 468  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 29  
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 ccggactggc tcgacgccga ggcgctggcc gaatggcggc gcgtcgacc gactttggag 180  
 cggcttgacc tgctcaaacc tgaggatcgg gcgtcctgt ccgcgtactg cgagacctgg 240  
 tccgtctacg tcgcggcggt tcagcgggtc cgcgcgaag gcctcacaat tacctaccg 300  
 aaatccggtg tcgtgcaccg gaaccggcg gtgacgggtg cggagacggc gcgcatgcat 360  
 ctgctgcgct tggcctccga gtttggcctg acccgggccg ccgagcagcg actggcggtg 420  
 gcgccggggc acgacggcga cgggctcaac ccgtttgcc cggaccgg 468

<210> 30  
 <211> 510  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 30  
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 tttcggcgct ccacgcgca ggcgggccac aaattgaagc tgctggtctc tcacgacgct 180  
 cgaacccgct acccggtggg ccgggcccgtt gagttgcggg aggagcctca cggcttgctc 240  
 ggggcgcttc agattgcgga caccgggac ggcgacgagg ctttggcgaa cgtaaaagct 300  
 ggtgtcgtcg actcgtttcc ggtgggttcc cgaccgatcc gggaccgtcg cgaaggggat 360  
 gtgctggtgc gcgtcgaagc ggcgctgtta gaggtttccc taaccggcgt tccggcctat 420  
 tcgggggcac aaatcgccgg ggtgcgcgcg gaatcgctta cagtcgtttc ccgttcgaca 480  
 gccgaagcct ggctgtccct actcgattgg 510

<210> 31  
 <211> 1419  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 31  
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ctgacgcgcc	acgccgagga	actgcgggcg	gagcagcgcc	gccgcggccg	cgaagccgag	180
gaggcgctgc	gccgctaccg	ggccgggtgag	ctgaggggtgg	tgcccggcgc	tcccaccggc	240
ggcgacgacg	gcgacgcgcc	gccgggcaac	tcgttgcggg	acaccgcgtt	tcgcacactg	300
gattcttgtg	tgcgagacgg	cctgatgtcg	tcgcggggcgg	cggagaccgc	ggaaaaccttg	360
tgccgcaccg	ggccgcccga	gtccacctcg	tgggcgcagc	gctggctggc	ggccaccggc	420
agccgcgact	atttgggcgc	gttcgtcaag	cgggtttcca	atcctgttgc	ggggcacacg	480
gtttggaccg	accgggaagc	ggccgcgtgg	cgtgaggctg	ccgcggtggc	cgccgagcag	540
cgagcgatgg	gcctggtgga	cacccaaggc	gggtttctga	tcccggcggc	gctggacccg	600
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caaacgacct	ccgagatttg	gcggggcgtg	acttccgaag	gcgccgaagc	tcgttggtag	720
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gttggcgaga	tcggcaagat	tctcgcggac	agcgttgagc	aactgcaggc	cgcggcgttc	900
gtcaacggct	ccggcaacgg	cgagcccacc	gggttcgtca	gcgcgctaac	cggcacctcc	960
gatcagggtg	tcgtcggcgc	ggggtcagaa	gcgattgtgg	cggcggatgt	ttacgcgttg	1020
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atcggcgaca	gagttgggtc	catggtggag	ttggtgcctc	acctgttcgg	gccgaatcgc	1320
cggccgaccg	ggcagcgcg	attcttcgcc	tgggttcagg	tcggatcaga	tgtgctggtg	1380
cgcaacgcgt	ttcgagttct	gaaggtggag	actaccgcg			1419

<210> 32

<211> 351

<212> DNA

<213> Mycobacteria tuberculosis

<400> 32

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agccagaatc	ggagcgtcgt	tcgacgaaaa	cagacactgc	tatcggcgca	gccctcggca	180
tctccgccgg	cacctaccgg	cggctcaaac	gaatcgacaa	cgcaaccgcg	agcgagttgg	240
cgcgtagggc	gcccggcacc	cctaagcaga	ggccgcccac	gcctggccct	atcctaccta	300
cgcgtagtgc	tccaccttca	gaactcgaaa	cgcgttgcgc	accagcacat	c	351

<210> 33

<211> 309

<212> DNA

<213> Mycobacteria tuberculosis

<400> 33

atgggctaca	aaccagaatc	agagcgtcat	tcgacgaaaa	cagacactgc	tatcggcgca	60
gccctcggca	tctccgccgg	cacctaccgg	cggctcaaac	gaatcgacaa	cgcaaccac	120
agcgacgaca	aagaaatccg	ccggttcgcg	gagaaacaaa	tggcgccgct	ggtcgccgga	180
tcgcccagct	ggaacgccc	aaagccaagg	agcgccaacg	cgagggtggt	cgcctcgggtg	240
catcgatcac	caatgccggc	tttgggtcca	tggaaacaaa	gccgtctcag	cgccacactg	300
acaaggagg						309

<210> 34

<211> 408

<212> DNA

<213> Mycobacteria tuberculosis

<400> 34

atgaccacca	caccagcacg	tttcaaccac	ttggtgacgg	taaccgacct	ggaaacgggt	60
gaccgcgccg	tctgcgaccg	cgaccagggtg	gccgagacga	tccgggcgtg	gttcccggac	120

gcgcccttgg	aggtgagggg	agcgctcggt	cggctgcagg	ccgcgttgaa	tcggcacgag	180
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ggcgacgagt	gcggcccgcc	gacccctggc	ggccgctccg	ggccggaaca	agccgccatc	300
aaccggcaac	tcggactcgc	cggcgacgac	gagcccgcag	gcgacgacac	cccgccgtgg	360
agccggatga	tcgggcttgg	cggcggaagc	ccagcggaag	acgagcgc		408

<210> 35

<211> 1407

<212> DNA

<213> Mycobacteria tuberculosis

<400> 35

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atgcacacac	tcaaggtcgc	cgtgatcgaa	ttggattcgg	acagacagga	attcgggtgc	120
gacgcgtttc	gcgaggtgat	cgctggccgg	ctgcataaag	ttgagccatt	gggctatcag	180
ctgggtgatg	tcccgttgaa	gttccatcac	ccgatgtggc	gggagcactg	ccaggtcgat	240
ctcaactacc	acatccggcc	gtggcgggtg	cgcgccccgg	ggggtcggcg	cgaactcgac	300
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ctcaatatct	cgtgtttaac	cgatggttcc	accgtgcagg	acccgcacga	agtaaccgcg	1320
ggaatgatcg	cggacttcat	cgaaatacgc	cgcgcgcgtg	gtctttccgt	ggagttgaca	1380
gtcgtcgagt	ccgcgatggc	gcaggca				1407

<210> 36

<211> 786

<212> DNA

<213> Mycobacteria tuberculosis

<400> 36

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agccggggct	tggccgatgc	gatggatcag	cttgacggcg	atgccggcct	gtcgggtggc	180
atcctgaccg	gtggggggcg	ttcggttctg	gcgggcatgg	acctcaaggc	gttcgcccgg	240
ggcgagaatg	tcgtcgtcga	aggctcgccg	cttggcttta	ccgaacgtcc	gccgaccaag	300
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ctgggtgccc	gcggcggggg	attgctgccc	ttgcgggagc	gcaccccgta	tgcgatagcc	480
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gtcaacgttt	tggccgagcc	ggggaccgcc	ctcgatgctg	cgatcgcggt	ggcgagaga	600
atcaccgcca	atgggcccgt	ggcgggtggt	gccaccaagc	ggattatcac	cgagtcgcgt	660
gggtggagtc	ccgacactat	gttcgctgag	cagatgaaga	tcctggtgcc	ggtgttcacc	720
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ggcacc						786

<210> 37  
 <211> 1461  
 <212> DNA  
 <213> M. tuberculosis

<400> 37  
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 ccgatggcgg ccgccgccga cgtcgacgcc gcggtcgccg cagcacgtgc ggcgttcgac 180  
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 aagatgctgg ctgagcgcaa ggacctgttc accaagctgc tcgcagccga aaccggccag 300  
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 ggccgcgaga acgggcccga ggggtgtcga cacttcaccg agcaaaagag tgtcctgctg 1440  
 ccgatgggct acaccgtcgc g 1461

<210> 38  
 <211> 831  
 <212> DNA  
 <213> M. tuberculosis

<400> 38  
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 ggcgcgatca agttggactg gcgcaccgac ctgcaggatc cggtaaaccg tgacttcgtc 180  
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 cacacctggg tcgtgttgcg ggaattactc ggacacaaaa acgtcaagaa ctacgacggc 780  
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<210> 39  
 <211> 300  
 <212> DNA  
 <213> M. tuberculosis

<400> 39  
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<210> 40  
<211> 441  
<212> DNA  
<213> M. tuberculosis

<400> 40  
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agtgtggacg aagtgctagc cgccgtctcg ggccccgaac aaggcggcat tgtcatatTT 120  
gtgggaaacg tgcgtgacca caatgccggg catgatgtca cgcggttgtt ctacgaggcg 180  
tatccgccga tggtagattcg gacattgatg tcgatcatcg gacggtgtga agacaaggcc 240  
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gtcgttattg gcgcgtcagc tccccaccgt gcggaaggcat ttgacgccgc gcgtatgtgt 360  
atcgagttgc ttaagcagga agtgccgatt tggagaagg aattcagctc gaccggtgct 420  
gaatgggtcg gcgatagacc a 441

<210> 41  
<211> 600  
<212> DNA  
<213> M. tuberculosis

<400> 41  
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gtgctgcagt tcggggtgcc agaaggggccg gttctggaac tggcgtgcgg tcgggtccggc 180  
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cgactattct ggcattccgc cacttttcgc caggcttgcg aggtctgtgg gccggggcgt 420  
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gaatgggtgct tgaagccagg ccagcccag tctgaacttc ccgccggctt cacggtgatt 540  
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<210> 42  
<211> 1200  
<212> DNA  
<213> Mycobacteria tuberculosis

<400> 42  
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cacacagcat ggctcgtcac tcgctttgac gatgtaaagg gagtgtgtc cgacaagcgt 180  
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gtccctatcg gagaacagct catggccaag ctactcgggg tcgagcccaa aaccgtgcac 480  
gagctcgcgg cgcacgtgga tgcggcgatg tccgtgtgtg agatcggcga cgaggaggtg 540  
agccggcggt ggtcagcact gtgcacgatg gtcacgaca tactgcaccg caagctcgcc 600  
gaaccgggtg atgacctact tagcacgatc gccaggcgca accggcaaca gtccaccatg 660



accgacgagc	aggttgtcgg	catgctcctc	accgtcgtga	tcggaggagt	cgacacaccg	720
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<210> 43  
 <211> 498  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 43						
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gctctactgg	actacctaga	tgcgcgtggc	ttcaaaactg	attacaccgg	catcgacgtc	120
tccccgaaa	tgggtgcgcg	ggccgcacta	cgtttcgaag	gtcggggcga	cgcagacttc	180
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gttcgtctga	aatcgttgga	cacggaatgg	tgcgctcaca	tcgaagcgac	gctcgacatg	300
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tcaaagatgc	gcgacgacct	gtactatgct	gacccatgcg	ccctatttga	tctctgcaag	420
cgcaggtact	ccaagagtgt	tgcgcttctg	cacgactacg	gcttgtatga	attcacaatt	480
ctggttagga	aggcgtca					498

<210> 44  
 <211> 693  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 44						
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cgaaacagaa	atcggatcaa	aacgagccag	gggttacagt	ggataactgt	tcccgtccag	180
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gctgactggc	tcgcgccgat	ttacctcgaa	gaacagcaca	cgaatctttc	cttactcaac	360
aggcgtctat	tgaatgcgat	ttgcagttat	ctcggtatca	gcacgcgact	ggcaaattcg	420
tgggactacg	aattagccga	cggcaagacc	gagagactgg	ccaacctctg	ccaacaggcc	480
gcagcgaccg	aatatgtctc	tggccctcca	gcccgttcgt	atgtcgatga	gcgcgtgttc	540
gacgaactta	gcacccgggt	aacttggttc	gattatgacg	gctaccgcga	ttataagcaa	600
ttgtggggag	ggttcgagcc	cgccgtgtcg	attctggatc	tgctctttta	cgtcggagcc	660
gaggctccgg	actatttgag	gtactgtcgc	cag			693

<210> 45  
 <211> 395  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<220>  
 <221> misc\_feature  
 <222> (1)...(395)  
 <223> n = A,T,C or G

<221> misc\_feature  
 <222> 27, 44, 104, 119, 180, 224, 237, 245, 254, 301, 327, 370,

385, 393

<223> n = A,T,C or G

<400> 45

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dysadytava	awaaryagsh	wgargcyvat	mavsawaarg	argrvvtga	aaawgvdrn	180
stgvvaayva	srrwgattva	vvkvvgvva	rwrwaggtgv	vvsnaawrgg	tashgknssg	240
grdrnvsgha	dsknysgkgt	grtgavvvvv	avagrrvmvg	vatatsadva	yyvvaavard	300
nggagdaahg	drrravgvvcv	savasvnmav	gyvyggakgv	vgttvtvtw	awvtcvvvsy	360
arkarhshn	gtrsdtdaas	ttscnvssrg	gcnyt			395

<210> 46

<211> 879

<212> DNA

<213> Mycobacteria tuberculosis

<400> 46

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gcggccgagg	cccgatattgc	acgcgactgg	ctgtccgagg	acctcgcgcg	gttgccctgtc	180
gggtgacgat	tgctggaagt	gggcgggggg	gtacttctgc	tcagctgtca	actggcggcg	240
gagggatttg	acatcaccgc	catcgagccg	acgggtgaag	gttttgga	gttcagacag	300
cttgccgaca	tcgtgctgga	attggctgca	gcacgaccca	ccatcgcgcc	atgcaaggcg	360
gaagacttta	tttccgagaa	gcgggttcgac	ttcgcccttct	cgctgaatgt	gatggagcac	420
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atgctggaac	gcgcgctgac	ggataaggaa	ttcgctgggtc	gccgggcaca	atggatggctc	780
gctgctattc	gctcggcggt	gaaattgcgt	gtgcatcatc	tggcaggcta	tggtcccgcgt	840
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<210> 47

<211> 1296

<212> DNA

<213> Mycobacteria tuberculosis

<400> 47

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gcgaccgcgt	tgcccggttg	ctgcgtctac	acggctcatc	atctggcggc	ccgcgacctc	180
cccccgctt	gtttttcgat	attcgcggtg	ttttgggggg	cgctcgccat	tgccaccggc	240
gccaccacg	gcctcctgca	agaaacgacc	cgcgaggtcc	gctgggtgcg	ctccaccaca	300
atagttgcgg	gccatcgtag	ccatccgctg	cgggtggccg	ggatgattgg	caccgtcgcg	360
gccgtcgtaa	ttgcgggtag	ctcaccgctg	tggagccgac	agctattcgt	cgagggcgcg	420
tggtgtccg	tggggctact	cagcggtggg	gtggccgggt	tctgcgcgca	ggcgaccctg	480
ctgggcgcgc	tgcccgcgct	cgaccggtgg	acacagtacg	ggctactgat	ggtgaccgac	540
gcgggtcatc	ggttggcggt	cgccgcggca	gcggttgtga	tcggatgggg	tctggccggg	600
tacttgtggg	ccgccaccgc	gggagcggtg	gcgtggctgc	tcattgctgat	ggcctcgccc	660
accgcgcgca	gcgcggccag	cctgctgacg	cccgggggaa	tcgccacgtt	cgtgcgcggg	720
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gcggtagcta	tgcctatgct	gacgctgacc	ggcgccgccc	cggtcgcgcc	cgactgcac	1140
cgggcgattt	tgctgggctg	ggtcagcgcg	acggtggcgt	cgacgctgtt	gctgctgctg	1200
ccgatgccgc	tggagacgcg	caccgtgatc	gcgctgttgt	tcggtccaac	ggtgggaatc	1260
gccatccatg	tggccgcgtt	ggcgcgccga	cccgc			1296

<210> 48

<211> 1020

<212> DNA

<213> M. tuberculosis

<400> 48

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tcgcggatcg	atcacctcta	cgtcgacccg	caccaaccgg	gcgcgcggct	gtttctgcac	180
tatggtgacc	tgatcgacgg	aaccgggttg	gtgaccctgc	tgagcaccat	cgaaccgcac	240
gaggtgtaca	acctggcggc	gcagtcacac	gtgcgggtga	gcttcgacga	acccgtgcac	300
accggtgaca	ccaccggcat	gggatccatg	cgactgctgg	aagccgttcg	gctctctcgg	360
gtgcactgcc	gcttctatca	ggcgtcctcg	tcggagatgt	tcggcgccctc	gccgccaccg	420
cagaacgagc	tgacgccgtt	ctaccgcggg	tcaccgtatg	gcgccgccaa	ggtctattcg	480
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ttcaatcacg	aatcaccgcg	gcgcgggtgag	acgttcgtga	cccgaagat	caccagggcc	600
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gccgcgttcg	agcatgccgg	tttggactgg	cagcagtacg	tgaaattcga	ccaacgctat	840
ctgcggccca	ccgaggtgga	ttcgctgatc	ggcgacgcga	ccaaggctgc	cgaattgctg	900
ggctggaggg	cttcggtgca	cactgacgag	ttggctcgga	tcattggtcga	cgccgacatg	960
gcggcgctgg	agtgcgaagg	caagccgtgg	atcgacaagc	cgatgatcgc	cggccggaca	1020

<210> 49

<211> 966

<212> DNA

<213> M. tuberculosis

<400> 49

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ctgctggtgc	ggtcacgcgc	cgagcttgat	ctgacggatc	gggcccgcgac	gttcgacttc	180
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cggcaa						966

<210> 50

<211> 729

<212> DNA

<213> Mycobacteria tuberculosis

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<400> 50
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agtgccgtgc tcgatgtcgg ggccaattcg gggcagtagc ccaggggtct gcgcggcgcg      180
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cgcagcgcct ccacggaccc gttgtgggaa tgccggcgct gtgcgtcggg cgatgtcgat      300
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ctcatccgcg aggcgctcga tctcgtggat tcgttgggct ttacgctctc gggattgcaa      660
cccggtttca ccgacccccg caacggtcga atgctgcagg ccgatggcat cttcttccgg      720
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<210> 51
<211> 786
<212> DNA
<213> Mycobacteria tuberculosis

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<400> 51
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atgggcgacc ttcacgcgag ctacccgttc gggggaaggc gaatatcaca tgcctacctc      720
cgcgccgggg agttctacgc ctacaacagt cgattctggg aaaacgtctt cacgcgaatg      780
tcgaaa                                     786

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<210> 52
<211> 894
<212> DNA
<213> Mycobacteria tuberculosis

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<400> 52
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ccggagtcct cgcgcacggt agacgaatcg tctcggttca tctcggcgcg cgggattctg      180
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gagttttccg acgaccgctc gtttgccag cgcgacaccg caaaatgggc gtcctgggac      720
aatcgccggt cattctggat tcaacgcgag cactacttc aggccatcaa agacgtcggc      780
gtcgacctgg tgatggagga gtacgacaac ttggaaccaa gcacgcccga gtcgttgctc      840
ggaggttctt atgcggcgaa tcttcgaggc accttcatcg gtatcaagac ccgg                                     894

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<210> 53  
 <211> 1119  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 53  
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 cagctttgcc ccaagggtgag catcgtctcg accactcaca accaggcggg ctacgcccgt 180  
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 gatgtgtggc cctcccggct ccgacgcggc tgtcgagcc 1119

<210> 54  
 <211> 282  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 54  
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 ttttggggcg gcgcgggttc ggtggcttgc caggagttca tcaccagct gggccgtaac 180  
 ttccaggtga tctacgagca ggccaacgcc cacgggcaga aggtgcaggc tgccggcaac 240  
 aacatggcac aaaccgacag cgcgctcggc tccagctggg cc 282

<210> 55  
 <211> 294  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 55  
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 gtgcacgccc agacgggtgga ggacgaggct cgccggatgt gggcgctccgc gcaaaacatc 120  
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 aatcaggcgt ttcgcaacat cgtgaacatg ctgcacgggg tgcgtgacgg gctggttcgc 240  
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<210> 56  
 <211> 324  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 56  
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<210> 57

<211> 1524

<212> DNA

<213> M. tuberculosis

<400> 57

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<210> 58

<211> 1536

<212> DNA

<213> M. tuberculosis

<400> 58

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<210> 59

<211> 1536

<212> DNA

<213> M. tuberculosis

<400> 59

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<210> 60

<211> 1173

<212> DNA

<213> Mycobacteria tuberculosis

<400> 60

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<210> 61

<211> 1062

<212> DNA

<213> Mycobacteria tuberculosis

<400> 61

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<210> 62

<211> 654

<212> DNA

<213> Mycobacteria tuberculosis

<400> 62

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<210> 63  
 <211> 489  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 63  
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 <212> DNA  
 <213> Mycobacteria tuberculosis

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<210> 66

<211> 720

<212> DNA

<213> M. tuberculosis

<400> 66

atgatccgat	tgggtccgtca	ttcgatcgcc	ctggtggccg	ccggccttgc	cgccgcattg	60
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ttcggatccg	ggcaagtgc	gggtgtgccg	gacacgttga	tcgctgacgt	cggcattcag	180
gtcaccgcgg	ccgacgtcac	cagcgcgatg	aaccagacca	atgatcgcca	gcaagcgggtg	240
atcgatgcac	tgggtgggtgc	cggcctggag	cgcaaggaca	tccgcaccac	cagggtcacc	300
gtggcaccgc	agtacagcaa	tccggagccg	gccggaaccg	ccaccatcac	cgggtatcgg	360
gcagacaacg	acatcgaggt	gaagatccac	ccgaccgacg	ccgcgtcgcg	gctgctggcc	420
ctcgtcgtca	gcaccggcgg	tgacgccacc	cggatcagct	cggtcagcta	ctcgattggc	480
gacgactcgc	agctggtgaa	ggatgcccgg	gcgcgcgcct	tccaagacgc	caagaaccgt	540
gcggaccagt	acgcacaact	gtcggggctg	cggctaggca	aggtgatctc	gatctccgag	600
gcattctggcg	ccgcgcccac	gcacgagggc	ccggcgccgc	cgcgcgccct	atccgcgggtg	660
cgcgtggaac	ccggccagca	gacgggtggc	ttctcggtca	cgggtggtctg	ggaactgacc	720

<210> 67

<211> 297

<212> DNA

<213> Mycobacteria tuberculosis

<400> 67

atgtcgatca	tgacgcccga	gccagagatg	ctggctgcga	ccgcggggga	actgcagtcg	60
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ccggccgcgg	ctgatttggt	gtccctgcta	accgcctccc	agtttgccgc	gcattgcacag	180
ctgtaccagg	cgattagtgc	cgaggcgatg	gcgggtccagg	agcagttggc	gaccacgctg	240
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<210> 68

<211> 1239  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 68  
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 ttcaagccga ccgtgatcgc ccaaccgccc gctggcgga 1239

<210> 69  
 <211> 294  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 69  
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 tccggcgcg gctggagtgg catggccgag gcgacctcgc tagacaccat gaccagatg 180  
 aatcaggcgt ttcgcaacat cgtgaacatg ctgcacgggg tgcgtgacgg gctggttcgc 240  
 gacgccaaca actacgaaca gcaagagcag gcctcccagc agatcctcag cagc 294

<210> 70  
 <211> 282  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 70  
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 ttttggggcg gcgccggttc ggccggcctgc caggggttca ttaccagct gggccgtaac 180  
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<210> 71  
 <211> 1185  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 71  
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tcgctgccct	accatcatcc	gctaattggtg	gccgaccgtt	gggtgctgct	ggatcacctg	300
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cacgaatggg	ctagaggcaa	gcgcgaccaa	ttgattggcc	gcgccggcga	agcggtcgtc	1140
aaagccatca	ccgagcacgt	cgccgaacaa	ggggaagcgg	gcagc		1185

<210> 72  
 <211> 966  
 <212> DNA  
 <213> M. tuberculosis

<400> 72						
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tcatggagac	accagattcc	tgcgcttgcc	gacgcgggt	accacgtgtt	ggctcccgat	180
cagcgcggtt	acggcggatc	gtctcgccca	gaggcgatcg	aggcctacga	cattcaccgg	240
ttgaccgctg	acctagtggg	cctactagat	gatgtcgggtg	ccgagcgggc	ggtctggggt	300
ggtcgatgact	gggggtgccgt	ggtgggtgtgg	aacgcgccac	tgctgcacgc	tgaccgagtc	360
gccgccgttg	ccgcggttgag	cgtcccccg	ctgccccggg	cacaggtgcc	gccgacgcaa	420
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gaccactaca	tcggcgaggt	cacccgcacc	ggtttcaccg	gcggcctgaa	ctggtaccgc	720
aacttcgacc	gcaactggga	gaccacggcc	gacctcgccg	gcaagacgat	ctccgtgcc	780
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gcggaggtga	tctccggccc	gtatcgcgag	gtgctgatcg	acggggccgg	tactggctg	900
cagcaggaac	gtcccgggtga	ggtgaccgcg	gccctgctgg	agttcctgac	gggggttgag	960
ttgcga						966

<210> 73  
 <211> 1365  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 73						
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gaccccgccg	tcaccgacgg	ctaccggcaa	gaccgggctt	ttgacccttc	ggccggcaaa	120
ccgctggcaa	tcattccggc	acggcgccacc	gaagaggtgc	agacgggtgct	gcgttgggccc	180
agtgcgaacc	aggtgcccgt	ggtgacccca	ggagccggta	gcggcctttc	gggcggggcg	240
accgccctgg	atggcgggat	cgtgctgtcc	accgaaaaga	tgcgcgacat	caccgtcgac	300
ccggtcaccc	gcaccgcagt	gtgccagccc	ggcctgtaca	acgccgaggt	gaaggaggcc	360
gccgccgaac	acggcctgtg	gtatcccccg	gatccgtcgt	cgttcgagat	ctgcagcatc	420
ggcgccaaca	tcgccaccaa	cgcgggcccgg	ctgtgctgcg	tgaagtacgg	cgtcacaggc	480

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gacctggccg	tggccctggg	cggcacgata	accggcgaac	acggcgtggg	ccggttgaaa	1260
cggcgtggt	tggccggcta	tctcggggcc	gacgtcctgg	ccctcaacca	gcgcataaag	1320
caagcgctgg	acccccaggg	catcctcaat	cccggctcgg	cgatc		1365

<210> 74

<211> 1215

<212> DNA

<213> Mycobacteria tuberculosis

<400> 74

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cgtcccagat	acgactacta	cgtgctgtcc	cggcacgccg	acgtctggtc	ggcagcgcg	180
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cgcaagctgg	tgctgcgcgg	cttcacgccca	cgacagggtcg	aaaccgtcga	gcccacgggtg	360
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gtcggcgccg	acggcgacac	cgccggcaca	ctgtccatac	tggcgttcac	gttcaccatg	720
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cggcgggccc	accagcgccg	gctgctgctg	gatgacccag	agggcatccc	cgacgcggtc	840
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cggatgcaat	gccgggtggc	gctgaccgaa	ctgctggccc	ggtgcccggg	cttcgaggtg	1140
gccgagtcac	gcatacgtgtg	gtccggcgcc	agttatgtcc	ggcgcccgct	gtcggtgccg	1200
ttccgagtga	catcc					1215

<210> 75

<211> 606

<212> DNA

<213> Mycobacteria tuberculosis

<400> 75

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gacgccgcgg	agcgactctt	tacgcagcgt	gaccggcggt	cgatcggcac	gaacgagatc	120
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acatcgctgc	tgatgttccc	cggccgtgac	gaagccgacg	aacgagcgat	gatcgcgagg	540
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cccag						606

<210> 76

<211> 534

<212> DNA

<213> Mycobacteria tuberculosis

<400> 76

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gactcattgt	ctgccgccgc	cgagcaattg	cgactaatgt	ataactcagc	taacatgacg	120
gctaagtcgc	tcaccgacag	gctcggcgag	ctgcaggaga	actggaaagg	tagttcgtcg	180
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taccggggccc	aaaatatcgc	tgtcatgaac	gactatcaaa	gtaccgcccg	gtttatccta	480
gcgtatctgc	cccgatggca	ggagccgccc	cagatctacg	ggggcggggg	cggg	534

<210> 77

<211> 1230

<212> DNA

<213> Mycobacteria tuberculosis

<400> 77

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ggcatccttg	ttgccggcac	cgaacacgcc	gccaacgagc	cgaccaccag	tagtccggca	1200
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<210> 78

<211> 753

<212> DNA

<213> Mycobacteria tuberculosis

<400> 78

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ttcctgcaag	cgttgcgtga	agacgagatc	gcccgcgcgc	agtccgcgcg	cctgacacga	180
cgattacgcc	gcgccaagtt	cgaagcccaa	gccaccttcg	aagacttcga	cttcactgcc	240

aacccgaaac	tgcccgggtgc	gatgttgcg	gatctggccg	cgctgcgctg	gctggatgcc	300
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tcactcctgg	atcgggtcat	caacaccagc	caccaaattc	tcattggacgg	accagctac	720
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<210> 79

<211> 696

<212> DNA

<213> *Mycobacteria tuberculosis*

<400> 79

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gccgagtcgc	tcaacaccac	gctcgacgag	ctgcacgaga	actggaaagg	tagttcatcg	180
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tgctcgacg	acacaccgcg	gtttcagatg	aatcaggcgt	ttcacacat	ggtgaacatg	660
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<210> 80

<211> 528

<212> DNA

<213> *Mycobacteria tuberculosis*

<400> 80

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gctgagtcgc	tcgaggacga	gctcgacgag	ctggatgaga	actggaaagg	tagttcgctc	180
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agcaacgtgg	ccgggggtaaa	cactccagca	atcgagacc	tcgatgcaca	atacgaccag	420
taccggggcc	gcaatgtcgc	tgtaatgaac	gcctatgtaa	gttggacccg	atctgcgcta	480
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<210> 81

<211> 1170

<212> DNA

<213> *M. tuberculosis*

<400> 81

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gataccgtca	ccgccgagcg	ctgggagtg	ccgacgccga	tgctgcccgc	ggtgcaaggc	180
ctgtcaccgg	atggggctga	cctacacgtg	gttgccagcg	gcgaccggtt	gttgcatggt	240
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tccggcggtga	cggtggcggt	cgcccggtatg	ggctggaacg	tgtatgacac	cgaggtgatc	360
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tccggcgatc	gggccacccc	gcaggcgctg	gcggtgctgc	tgaccgagca	cggtcgcggt	480
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cgattccagc	actatctcgg	cgaaccgctg	ggcggttca	ccggttggcg	cccacagctg	1140
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<210> 82

<211> 747

<212> DNA

<213> Mycobacteria tuberculosis

<400> 82

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caactcgcgc	accaggccgc	cgcactccgc	gcagctggcg	ctatagcggg	gcacaccggg	180
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ggcctggagc	gcttcgccag	cggcctggcc	gatgcgttgc	acggcaccgg	ggtgcgggta	540
ctgatecgcg	ggccgggatt	cgtcatcggg	cgcataccgc	agggcatgac	gcccgcaccc	600
ctgtcgggtc	ccccggagcg	ggtggccgcc	gcgaccgcgc	gtgcgctggg	caacggtaag	660
cgcgtggtgt	ggattccgtg	ggcgctgcgg	ccaatgtttg	ttgcgctgcg	gttgcttccc	720
cggttcgtct	ggcgcaggat	gccgcga				747

<210> 83

<211> 411

<212> DNA

<213> Mycobacteria tuberculosis

<400> 83

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ggtttcacct	tcgaccccaa	gactcacatc	gcgcgggtca	tcaccaccgg	cggctcccaa	180
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gagctgcgct	acgcgcagcg	ctatcgaccc	ccgcgtccca	atccacgccg	agtggtcac	360
gaggtccaga	ttgagcgcg	gctgggatcc	gcggatctgc	tcgaccgggc	c	411

<210> 84

<211> 1461

<212> DNA

<213> Mycobacteria tuberculosis

<400> 84

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gcatcctgtg	acgtaataag	cccgggttgc	atcccctgcg	tggcgctcgg	caagttcgcc	180
gacgcgggtc	ctgcggagtg	tcgccgcgtc	ggtgtgcccc	atgcgcgggt	cgtgcttccc	240



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<210> 85

<211> 429

<212> DNA

<213> Mycobacteria tuberculosis

<400> 85

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tacacggaac	cgcccgtgtt	ggggatcggc	ccggcgccgg	cccgcgggct	ggccgctgag	360
ctgctcaacg	ccgccgacac	cctcgacgac	ggccgcccgg	agctagacga	cctcgccgaa	420
caccggcg						429

<210> 86

<211> 996

<212> DNA

<213> Mycobacteria tuberculosis

<400> 86

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gggcacctag	gggtgggtga	agccttcctg	gcggcgccca	agtcgcaaaa	caagccgccc	180
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gtacaacaac ttctcgggtca cgctctgatac gtgacaacag aacgctacac agcgctgtgc	960
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<210> 87  
 <211> 366  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 87	
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gagctggaac ggccgaaagc caaacagcgg caacgcgaag gcggcgacca tggccgccag	180
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aaacgaatcg acaacgcaac ccgcagcgaa gctgggtacc gggatggttt aaacgggttg	360
agcggc	366

<210> 88  
 <211> 324  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 88	
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ctacttggtg ttggctgctc ggagacggtg cgtaagtggg tgcgccaggc gcaggtcgat	180
gccggcgcac ggcccgggac cagcaccgaa gaatccgctg agctgaagcg cttgcggcgg	240
gacaacgcgc aattgcgaag ggccaacgcg attttaaaga ccgcgtcggc tttcttcgcg	300
gccgagctcg accggccagc acgc	324

<210> 89  
 <211> 984  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 89	
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ttcatcgccg atcatcaggg ccaccgcgag ggccccgatg gtttgcggtg ggggtgctgag	120
tcgatctgca cacagctgac cgagctgggt gtgccgatcg ccccatcgac ctactacgac	180
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cgcctctacc agtactgcgg cgacgtccc cggtcgaac tcgaggctgc ctactacgct	960
caacgccaga gaccagccgc cggc	984

<210> 90  
 <211> 1437  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 90

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<210> 91

<211> 531

<212> DNA

<213> Mycobacteria tuberculosis

<400> 91

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<210> 92

<211> 624

<212> DNA

<213> Mycobacteria tuberculosis

<400> 92

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624

<210> 93

<211> 321

<212> DNA

<213> Mycobacteria tuberculosis

<400> 93

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cgcgcccaac	ggcagcgcg	cctcgaggct	atccgcccag	cgtagccgga	gatggtggcg	180
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gatgagcagc	gccggcttga	ggcggggatg	aagctcggct	ggcatccgta	tcacttcccc	300
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<210> 94

<211> 243

<212> DNA

<213> Mycobacteria tuberculosis

<400> 94

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accgcggccg	tcgagcttgc	gcgagcggtg	gtccgcgctg	tggcggagtc	gcacggcgctc	180
gcggccggtt	tggttcgccc	gacggccgcc	gcggcggcgg	ccgtcgaccg	gggtgatccg	240
ccg						243

<210> 95

<211> 1425

<212> DNA

<213> Mycobacteria tuberculosis

<400> 95

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ttcgtagtct	atccaagcga	ccatgaactg	atcgcgcaca	ccctctggat	tgcgcatgtc	180
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 <213> Mycobacteria tuberculosis

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 <212> DNA  
 <213> Mycobacteria tuberculosis

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 <212> DNA  
 <213> Mycobacteria tuberculosis

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<210> 100

<211> 225

<212> DNA

<213> Mycobacteria tuberculosis

<400> 100

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<210> 101

<211> 186

<212> DNA

<213> Mycobacteria tuberculosis

<400> 101

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<210> 102

<211> 357

<212> DNA

<213> Mycobacteria tuberculosis

<400> 102

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<210> 103

<211> 1854

<212> DNA

<213> Mycobacteria tuberculosis

<400> 103

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<210> 104

<211> 1242

<212> DNA

<213> Mycobacteria tuberculosis

<400> 104

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<210> 105

<211> 1284

<212> DNA

<213> Mycobacteria tuberculosis

<400> 105

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<210> 106

<211> 1284

<212> DNA

<213> Mycobacteria tuberculosis

<400> 106

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<211> 309

<212> DNA

<213> Mycobacteria tuberculosis

<400> 107

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 <212> DNA  
 <213> Mycobacteria tuberculosis

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<211> 813  
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<213> Mycobacteria tuberculosis

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<211> 1275  
<212> DNA  
<213> M. tuberculosis

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<210> 113

<211> 1026

<212> DNA

<213> Mycobacteria tuberculosis

<400> 113

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ggcgtcgagg	tcggcaaggt	caccaggatc	tccatcaacc	ccgacgcgac	ggtgcgggtg	240
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<210> 114

<211> 1230

<212> DNA

<213> Mycobacteria tuberculosis

<400> 114

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<210> 115

<211> 1269

<212> DNA

<213> Mycobacteria tuberculosis

<400> 115

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<210> 116

<211> 1131

<212> DNA

<213> M. tuberculosis

<400> 116

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 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 117  
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<210> 118  
 <211> 573  
 <212> DNA  
 <213> Mycobacteria tuberculosis

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<210> 119  
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 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 119  
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<210> 120

<211> 375

<212> DNA

<213> Mycobacteria tuberculosis

<400> 120

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<210> 121

<211> 663

<212> DNA

<213> Mycobacteria tuberculosis

<400> 121

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cag						663

<210> 122

<211> 405

<212> DNA

<213> Mycobacteria tuberculosis

<400> 122

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gaccgccatc	gcgcgatggg	gatgctgggt	gaaaggctcg	aggggtgggc	catcaccaag	120
gctcggggcg	acgacgtgac	ggtggtgttc	gagcggccgc	cgtcgaccgc	catcccgatc	180
tcggtggtcg	aagtggcgca	tgcgcccga	gcggccgcca	actcggccga	cgacgagatc	240
gtccgggtgg	tccgatccgg	cgcgcagcca	caagagattc	gtgtggtgac	atcgacaaa	300
gcgttgaccg	accgggtccg	agacttgggt	gcggcagtc	acccggcaga	acggttccgt	360
gaccttatcg	acccgcgccc	gtcgaacgcg	gcccgcgcca	cgcag		405

<210> 123

<211> 1044

<212> DNA

<213> Mycobacteria tuberculosis

<400> 123

atgtctcaga	caccgcgtac	aaccgcgaaa	acgtttcccg	agatcagctc	aagagcgtgg	60
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gagcaccgcc	ccgaccggac	cgccctttcc	gcgctgcgcc	ggctcaaagg	cttcgaccag	120
atcttgaagc	tgatgtcggg	gatgtttcgg	gaacggcagc	accggctgct	gtacctggcc	180
agcgcggcac	gggtcgggcc	gcggcagttc	gccgacctcg	acgcgctgct	ggacgaatgc	240
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ggccacgcgg	tgtaccgcac	gatgatgatg	catctgctgc	ggttggccccg	gtcattcggc	480
gtcttgccgg	ttggcggtcg	ggcgctgcgc	gcaatcgtgg	ctgcgctgct	ggaatggcag	540
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gcgctcaggg	tggagatgaa	gctcgctggc	ggctgcgggc	tggacaagct	ggactcggag	660
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gacggcttcg	accagtccaa	cgacccgctg	atcaaaggta	tccgcgacgg	attcgggtggc	960
atcgctcagg	gcgtgggacg	ggcagcctcg	aacgcggccg	attcattggg	ccgcaagatc	1020
accgagtggc	ggcagccctc	gaag				1044

<210> 124

<211> 564

<212> DNA

<213> Mycobacteria tuberculosis

<400> 124

atgactacgc	gtccggcaac	cgaccgcccgc	aagatgcccc	ctgggcggga	agaggtagcg	60
gccgcaatcc	tgcaggccgc	caccgacctg	ttcgccgagc	gtgggccagc	cgcgacgtcg	120
attcgcgaca	tcgcccgtcg	atccaaggtc	aaccacgggc	tgggtgtttcg	tcacttcggc	180
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ttagccccgg	cactgctgga	cggatatccc	gtgggccagc	tgcaacagcg	atttcccaat	360
gttgccggagc	tgctcgacgc	ggtacggcct	cgctacgaca	gcgacttggg	cgcgcggctg	420
gcggctcgcg	acgcccttgc	gctgcaattc	ggttggcggc	tctttgcgcc	catgctgcgc	480
tcggcgacgg	gtatcgacga	gctgaccggg	gacgaactac	ggctgtccgt	gaacgatgcg	540
gtagccccga	tcctggaacc	gcac				564

<210> 125

<211> 702

<212> DNA

<213> Mycobacteria tuberculosis

<400> 125

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gccaggcatg	gcgatatgga	cgtctatcag	tcccccatcg	gccagctgcc	gggtgtccccg	120
cgatgtgatg	tcgcagagcg	cgtcgcgga	atcgtggagc	ggtatgacct	cgtcctttcc	180
ttccactgta	aacagagggt	tcccgcgcgt	ttgatcgatg	gggtcagggtg	tgtgaatggt	240
catccgggtt	tcaaccccta	caaccgcggc	tggtttcccc	aggtcttctc	gatcatcgac	300
gggcaaaaag	tcggcggtgac	gatccacgag	atcgacgata	agttggacca	tgggtccgatc	360
atcgcccagc	gggaatgcgc	gatcgagtcg	tgggattcct	cgggaagtgt	ctacgcccgg	420
ctgatggaca	tcgagcgtga	gttgggtgctg	gaacatttcg	acgccatccg	ggacggcagc	480
tacacggcta	aatcgccggc	caccgagggc	aacctcaacc	tgaaaaagga	tttcgaacaa	540
ctccggcggc	tagacctgaa	cgagcgcgga	acgtttgggc	atttcctgaa	tcgcctgcgc	600
gcgttgacct	atgatgattt	ccgcaacgct	tggttcgtcg	atcgctcagg	ccgcaagggtg	660
tttgtccgcg	tcgtgctcga	accggagaag	cccgcggaag	cc		702

<210> 126

<211> 1599

<212> DNA

<213> Mycobacteria tuberculosis

<400> 126

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agcccctcgg	catcgcccaa	gttgcgcata	gcggtggtgg	agcgagacga	gcagttctgg	180
tgcggaatcc	cctatggcca	acgctccagc	atcggatcgc	tggccattca	gaagctcgac	240
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aaccgcgacg	cattggacgg	caaccagtgg	ggggagctct	acctgcgcgc	gtttctcttc	420
ggtgtatttc	tgtcggagca	gatgattgcc	gccatcgccg	cgctcggcga	gcgtgacctg	480
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ttttggcacg	tcgagagcgc	accgcgcgtc	cggtcgctgg	cgaatcgct	ggcggccagc	1560
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<210> 127

<211> 1236

<212> DNA

<213> *Mycobacteria tuberculosis*

<400> 127

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atccgcccga	gctttcccgg	gccagccgag	ctcgccgagg	acttcgtaca	gatcgcccag	180
gctaactggt	acacgaactt	cggctccgaac	gagcggcggt	ttgcccgcgc	cctgcgcgac	240
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gcgtccacg	tcagtttcgg	cgccggtagc	cgggaccgct	acctgctgat	gccgtcgttc	360
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cgcgaccgga	tcgccggcat	cctgctggcc	aatgtgttcg	gcgtcggcaa	tccccagatc	540
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tcgcgaatcg	tgtcgtgccc	agtccacgac	cacatggccc	cggatgacgt	tgcccgggtc	1200
gtcgccgccc	tgcaggaagc	ggaggtgcgc	ggtgaa			1236

<210> 128



<211> 2358  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 128

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cgcggcaacc	tcgacgaggg	cgaacccttc	ggactgccgg	gcacctacct	gaactctttc	180
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cgccgggctt	tagcccg					2358

<210> 129  
 <211> 786  
 <212> DNA  
 <213> Mycobacteria tuberculosis

<400> 129

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cataccaagg	cgtggaaggc	catgtttgac	gcctacctag	ccgagcgagc	cgagcgaccc	180
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gcggccggcc gcgccggcaa cttcgccgta gtggtgggca tcaaccgaac gggccggggcg	720
gctcaggccg ccagttgcg ccgccatggc gccgacgtgg tggtaacga tctcgccgag	780
ctgctg	786

<210> 130  
 <211> 60  
 <212> DNA  
 <213> M. tuberculosis

<220>  
 <221> misc\_feature  
 <222> (1)...(60)  
 <223> n = A,T,C or G

<221> misc\_feature  
 <222> 2, 55  
 <223> n = A,T,C or G

<400> 130	
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<210> 131  
 <211> 60  
 <212> DNA  
 <213> M. tuberculosis

<400> 131	
agtagtaatg tgcgagctga gcgatgtcgc cgctcccaaa aattaccaat ggttttgggtca	60

<210> 132  
 <211> 60  
 <212> DNA  
 <213> M. tuberbubolosis

<400> 132	
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<210> 133  
 <211> 60  
 <212> DNA  
 <213> M. tuberculosis

<400> 133	
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<210> 134  
 <211> 11  
 <212> DNA  
 <213> M. tuberculosis

<400> 134 actcttggag t	11
<210> 135 <211> 11 <212> DNA <213> M. tuberculosis	
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<210> 136 <211> 49 <212> DNA <213> M. tuberculosis	
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